

Amendments to the Specification:

Please amend the paragraph starting at page 4, line 23 and ending at page 5, line 5 to read, as follows.

--As the intermediate transferring belt 101, carbon is dispersed in polyimide and the surface resistivity  $\rho_s$  thereof is adjusted to medium resistance of  $1 \times 10^{12} \Omega/\square$  ~~[[ $\Omega$ ,]]~~ whereby charges added to the belt with the transferring step or the like can be attenuated without providing any special residual charge eliminating mechanism. Also, the intermediate transferring belt 101 is a single-layer endless belt having a circumferential length of 1000 mm and a thickness of 100  $\mu\text{m}$ .--

Please amend the paragraph starting at page 7, line 7 and ending at page 7, line 15 to read, as follows.

--Now, when the intermediate transferring belt 101 of high hardness is used as described above, if a roller of low hardness is used as the secondary transferring roller 102, the nip width becomes ~~become~~ liable to widen and therefore, this has led to a case where the contact pressure P of the secondary transferring roller 102 assumes a low value and the color unevenness of an image attributable to the secondary transferring step is caused.--

Please amend the paragraph starting at page 10, line 3 and ending at page 10, line 16 to read, as follows.

--It is another object of the present invention to provide an image forming apparatus which is provided with an image bearing member bearing an image thereon, and a transfer member contacting with the image bearing member in a contact portion, and in which the

image on the image bearing member is transferred to a transfer medium in the contact portion by the transfer member, the surface resistivity of the image bearing member is equal to or greater than  $1 \times 10^8 \frac{\Omega}{\square}$   $[[[\Omega]]]$  and equal to or less than  $1 \times 10^{15} \frac{\Omega}{\square}$ ,  $[[[\Omega],]]$  and the contact pressure between the image bearing member and the transfer member in the contact portion is equal to or greater than  $4.0 \times 10^4 \text{ [N/m}^2\text{]}$  and equal to or less than  $3 \times 10^4 \text{ [N/m}^2\text{]}$ .

Please amend the paragraph starting at page 12, line 22 and ending at page 13, line 5 to read, as follows.

--The intermediate transferring belt 1 used in the present embodiment is one in which carbon is dispersed in polyimide and surface resistivity  $\rho_s$  has been adjusted to medium resistance of  $1 \times 10^{12} \frac{\Omega}{\square}$ ,  $[[\Omega,]]$  and charges imparted to the intermediate transferring belt 1 at a transferring step or the like can be attenuated without any special residual charge eliminating mechanism being provided. This intermediate transferring belt 1 is a single-layer endless belt having a circumferential length of 1000 mm and a thickness of 100  $\mu\text{m}$ .--

Please amend the paragraph starting at page 13, line 15 and ending at page 13, line 19 to read, as follows.

--Also, the Young's modulus  $E$  of the intermediate transferring belt 1 in the present embodiment is high hardness of  $9 \times 10^9 \text{ N/m}^2$ , whereby  $[[\text{the}]]$  fracture or creep of the belt is prevented and a longer life is achieved.--

Please amend the paragraph starting at page 18, line 13 and ending at page 18, line 23 to read, as follows.

--As described above, the intermediate transferring belt 1 used in the present embodiment is one in which carbon is dispersed in polyimide to thereby adjust the surface resistivity  $\rho_s$  to medium resistance of  $1 \times 10^{12} \Omega/\square$ ,  $[[\Omega,]]$  and charges imparted to the belt 1 at the transferring step or the like can be attenuated without any special residual charge eliminating mechanism being provided, and the Young's modulus E is high hardness of  $9 \times 10^9 \text{ N/m}^2$ , whereby  $[[the]]$  fracture or creep of the belt is prevented and a longer life is achieved.--

Please amend the paragraph starting at page 23, line 20 and ending at page 24, line 6 to read, as follows.

--The PVD belt under item (2) and the PES belt under item (3) were formed into single-layer endless belts having a circumferential length of 1000 mm and a thickness of 100  $\mu\text{m}$  by dispersing carbon to thereby adjust the surface resistivity  $\rho_s$  to  $\rho_s = 1 \times 10^{12} \Omega/\square$ ,  $[[\Omega.]]$  Also, the urethane resin coat belt under item (4) was formed into a two-layer endless belt having surface resistivity  $\rho_s$  of  $1 \times 10^{12} \Omega$  on the toner bearing surface side and having a circumferential length of 1000 mm and a thickness of 500  $\mu\text{m}$  by dispersing carbon to thereby adjust the volume resistivity of NBR to  $1 \times 10^6 \Omega\cdot\text{cm}$ , and coating NBR with urethane resin having volume resistivity of  $1 \times 10^9 \Omega\cdot\text{cm}$  to 30  $\mu\text{m}$ .--

Please amend the paragraph starting at page 25, line 2 and ending at page 25, line 3 to read, as follows.

--Result of Evaluation of the Image Quality ~~Quality of Image~~

(Color Unevenness Level/Hollow Character Level)--

Please amend the paragraph starting at page 26, line 10 and ending at page 26, line 16 to read, as follows.

--According to the present studies, the image color unevenness becomes better when the contact pressure P is increased, but the higher was the contact pressure P, the more was seen the occurrence of a hollow character image. Also, the higher was the Young's modulus E, the more aggravated was ~~was aggravated~~ the image color unevenness.--

Please amend the paragraph starting at page 33, line 11 and ending at page 33, line 17 to read, as follows.

--As shown in Fig. 4, in the present embodiment, as an intermediate transferring belt 24, use is made of a single-layer endless belt having a circumferential length of 1000 mm and a thickness of 100  $\mu\text{m}$  in which carbon is dispersed in polyimide and both of a toner bearing surface side and a back side are adjusted to surface resistivity  $\rho_s = 1 \times 10^{12}$   $\Omega/\square$ . ~~[[ $\Omega$ .]]~~--

Please amend the paragraphs starting at page 34, line 12 and ending at page 34, line 25 to read, as follows.

--Also, the amount of carbon dispersed in polyimide was adjusted to thereby change the surface resistivity  $\rho_s$  of the intermediate transferring belt from  $1 \times 10^6$  to equal to or greater than  $1 \times 10^{15} \Omega/\square$ . [[ $\Omega$ .]]

The intermediate transferring belt of which the surface resistivity  $\rho_s$  is “equal to or greater than  $1 \times 10^{15} \Omega/\square$ ” [[ $\Omega$ ’]] has surface resistivity of equal to or greater than  $1 \times 10^{15} \Omega/\square$  [[ $\Omega$ ]] which is the measurement limit by the background noise of the above-described surface resistivity measuring system and therefore, here it is expressed as equal to or greater than  $1 \times 10^{15} \Omega$ . The measurement of the surface resistivity was effected by the method described in the first embodiment.--

Please amend the paragraph starting at page 35, line 3 and ending at page 35, line 8 to read, as follows.

--In Experimental Examples 8 to 14, the dependency of the image quality ~~quality of image~~ on the contact pressure P and on the surface resistivity  $\rho_s$  was studied. The result of the comparative studies of an image about the respective experimental examples is shown in Table 3 below.--

Please amend Table 3 to read, as follows.

--Table 3

|                            | Result of Evaluation of <del>Image Quality</del> <u>Quality of Image</u><br>(Color Unevenness Level/Hollow Character Level) |  |                 |                    |                    |                    |   |
|----------------------------|---|--|-----------------|--------------------|--------------------|--------------------|---|
|                            | Contact<br>Pressure P<br>[N/m <sup>2</sup> ]  | Surface Resistivity ps $\Omega/\square$ [[[ $\Omega$ ]]] |                 |                    |                    |                    |   |
|                            |   | $1 \times 10^6$  | $1 \times 10^8$ | $1 \times 10^{10}$ | $1 \times 10^{12}$ | $1 \times 10^{14}$ | Equal to or<br>greater than<br>$1 \times 10^{16}$ |
| Experimental<br>Example 8  | $2.7 \times 10^4$   | x/o  | x/o             | x/o                | x/o                | x/o                | o/o   |
| Experimental<br>Example 9  | $3.5 \times 10^4$   | x/o  | x/o             | x/o                | x/o                | $\Delta$ /o        | o/o   |
| Experimental<br>Example 10 | $4.0 \times 10^4$   | $\Delta$ /o  | o/o             | o/o                | o/o                | o/o                | o/o   |
| Experimental<br>Example 11 | $4.8 \times 10^4$   | $\Delta$ /o  | o/o             | o/o                | o/o                | o/o                | o/o   |
| Experimental<br>Example 12 | $6.2 \times 10^4$   | o/x  | o/o             | o/o                | o/o                | o/o                | o/o   |
| Experimental<br>Example 13 | $7.3 \times 10^4$   | o/ $\Delta$  | o/ $\Delta$     | o/ $\Delta$        | o/ $\Delta$        | o/ $\Delta$        | o/o   |
| Experimental<br>Example 14 | $8.0 \times 10^4$   | o/x  | o/x             | o/x                | o/x                | o/x                | o/x   |

Please amend the paragraphs starting at page 37, line 2 and ending at page 37, line 17 to read, as follows.

--Also, in an intermediate transferring belt of  $1 \times 10^6 \frac{\Omega}{\square}$ ,  $[[\Omega,]]$  it never happened that even if the contact pressure was increased, good color unevenness and hollow characters were compatible.

An intermediate transferring belt of equal to or greater than  $1 \times 10^{15} \frac{\Omega}{\square}$   $[[\Omega]]$  is great in the time constant of charge attenuation and charges imparted to the surface thereof are residual thereon and therefore, during image forming, a corona charger, not shown, was installed at a location on the intermediate transferring belt downstream of the cleaning blade 4 and upstream of the photosensitive drum 11a for the first color, and an image forming was effected while applying an AC bias of  $10 \text{ kV}_{pp}$ , 1 kHz and sine wave to thereby eliminate the residual charges on the intermediate transferring belt.--

Please amend the paragraphs starting at page 38, line 7 and ending at page 39, line 7 to read, as follows.

--By heightening the surface resistivity  $\rho_s$ , the difference in the transferring electric field applied to the toner layer in areas wherein the air gaps exist and areas wherein the air gaps do not exist can be made small, and the difference in the amount of untransferred toners in the areas wherein the air gaps exist and the areas wherein the air gaps do not exist can be made small. Thereby, the residual toners ~~tones~~ on the intermediate transferring belt become uniform and the color unevenness is improved.

From the above-described result of the comparative studies, the inventor has been able to confirm that Experimental Examples 10 to 13 are effective for the color unevenness

and the center blank and in a case where the surface resistivity  $\rho_s$   $\Omega/\square$  [[[ $\Omega$ ]]] of the intermediate transferring belt is  $1 \times 10^8 \leq \rho_s \leq 1 \times 10^{15}$ , the occurrence level of the color unevenness and the center blank image can be rendered into a level which practically poses no problem, by setting the contact pressure  $P$  [ $\text{N}/\text{m}^2$ ] to the range of  $4.0 \times 10^4 \leq P \leq 7.3 \times 10^4$ , without having any special residual charge eliminating device for the intermediate transferring belt.

Consequently, in the present embodiment, setting is done such that the surface resistivity  $\rho_s$   $\Omega/\square$  [[[ $\Omega$ ]]] of the intermediate transferring belt 24 is  $1 \times 10^8 \leq \rho_s \leq 1 \times 10^{15}$  and the contact pressure  $P$  [ $\text{N}/\text{m}^2$ ] is within the range of  $4.0 \times 10^4 \leq P \leq 7.3 \times 10^4$ .--